

Appl. No. 09/885,354
Amdt. dated May 26, 2004
Reply to Office Action of Jan. 26, 2004
Page 14

REMARKS

In accordance with the forgoing, the specification and claims 10-12, 14, 20, 27, 28 and 30-48 have been amended, claims 1-9, 17-19 and 22-25 have been canceled without prejudice or disclaimer of the subject matter contained therein, and new claims 49-53 have been added. Claims 10-12 14-16, 20, 21 and 26-53 are pending and under consideration. The following remarks are respectfully submitted.

I. Objections to the Drawings

The drawings stand objected to as not showing two different types of thermoplastic material. The Examiner's attention is drawn to FIGS. 1 and 2, for example, which show the core element 2, which is formed of the first thermoplastic material, and to FIGS. 11 and 14, which show the second thermoplastic material after it is overmolded on the core element 2. Accordingly, it is respectfully submitted that the two thermoplastic materials are shown in the drawings and withdrawal of the objection is requested.

In addition, amendments to FIGS. 11 and 14 have been made to add a reference numeral "191" to indicate the second thermoplastic material in replacement sheets, filed concurrently herewith. Approval and entry of the requested drawing changes is respectfully requested.

II. Objections to the Specification

The title of the invention stands objected to as not descriptive. Accordingly, the title has been changed to "A Connector Assembly for An Implantable Medical Device and Process for Making". Accordingly, withdrawal of the objection to the title of the invention is respectfully requested.

The abstract of the disclosure stands objected as being too long. The abstract of the disclosure has been amended to be of proper length and content,

Appl. No. 09/885,354
Amdt. dated May 26, 2004
Reply to Office Action of Jan. 26, 2004
Page 15

and is set forth in replacement sheet page 26, filed concurrently herewith. Accordingly, withdrawal of the objection to the abstract of the disclosure is respectfully requested.

Additional amendments have been made to the specification merely to correct misnumbered reference numerals. No new matter has been added. Entry of the amendments is respectfully requested.

III. Objections to the Claims

Claims 14, 25 and 27 stand objected to as containing informalities. Applicants wish to extend their gratitude to the Examiner for pointing out the informalities. Claim 14 has been amended to change "assembly to coupled" to "assembly to be coupled", claim 25 has been canceled without prejudice or disclaimer of the subject matter contained therein, and claim 27 has been amended to depend from claim 26. Accordingly, withdrawal of the objections is respectfully requested.

In addition, further amendments were made to the claims merely to more clearly set forth the features as previously set forth, and are not intended to effect the scope of those claims unless referred to below. Entry of those amendments is respectfully requested

IV. Rejections Under 35 USC § 112

Claims 1-29 stand rejected under 35 USC § 112, second paragraph as being indefinite for failing to point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1-9 and 13 have been canceled without prejudice or disclaimer of the subject matter contained therein and claims 10-12 have been amended to depend from independent claim 14, which is directed to a connector assembly to be coupled to an implantable medical device. Therefore, it is respectfully requested that the rejection be withdrawn.

Appl. No. 09/885,354
Amdt. dated May 26, 2004
Reply to Office Action of Jan. 26, 2004
Page 16

V. Rejections Under 35 USC § 102

Claims 1-6, 11-19 and 28 and 29 stand rejected under 35 USC § 102(e) as being anticipated by U.S. Patent No. 5,926,952 to Ito ("Ito"). Applicants respectfully submit that the claims of the present invention are patentably distinguishable over Ito and the rejection is respectfully traversed.

Claim 14 of the present invention is directed to a connector assembly that includes a core portion formed of a first thermoplastic material shaped to receive a connector member for receiving a lead, and an overmold portion formed of a second thermoplastic material to extend over and adhere to at least part of the core portion and at least part of a first circuit element, positioned adjacent to the core element, through injection molding of the second thermoplastic material.

Ito teaches a method of producing a connector in which a metal terminal is supported by a core, and then a resin is molded around the core. As described, for example, at column 4, lines 42-58, the resin provided around the core is prevented from being deposited on the metal terminals. Therefore, Ito does not teach away from an overmold portion formed of a second thermoplastic material to extend over and adhere to at least part of the core portion and at least part of a first circuit element, as set forth in independent claim 14 of the present invention. Therefore, independent claim 14 and claim 11-12, 15, 16, 28 and 29 are patentably distinguishable from Ito. Accordingly, it is respectfully requested that the rejection be withdrawn.

Claims 30-35 and 38-43 stand rejected under 35 USC § 102(e) as being anticipated by U.S. Patent No. 6,219,913 to Uchiyama ("Uchiyama"). Applicants respectfully submit that the claims of the present invention are patentably distinguishable over Ito and the rejection is respectfully traversed.

Claim 30 of the present invention is directed to a process for making a connector assembly for use in an implantable medical device that includes forming a core element of a first thermoplastic material, positioning at least one circuit element adjacent to the core element and having a first portion extending

Appl. No. 09/885,354
Amdt. dated May 26, 2004
Reply to Office Action of Jan. 26, 2004
Page 17

within the core element and a second portion extending outward from the core element, and forming an overmold structure of a second thermoplastic material to extend over and adhere to at least a portion of the core element and at least a portion of the at least one circuit element.

Uchiyama teaches a housing 1 formed by inserting molding around a core member 7 formed from a separate mount plate 8 positioned between two terminal fittings 2A and 2B. The mount plate 8 prevents the terminal fittings from being deformed by the injection pressure. Uchiyama does not teach positioning at least one circuit element adjacent to the core element and having a first portion extending within the core element and a second portion extending outward from the core element, and forming an overmold structure of a second thermoplastic material to extend over and adhere to at least a portion of the core element and at least a portion of the at least one circuit element, as set forth in independent claim 30 of the present invention. Therefore, independent claim 30 and claims 31-35 and 38-43 are patentably distinguishable from Uchiyama. Accordingly, withdrawal of the rejection is respectfully requested.

VI. Rejections Under 35 USC § 103

Claims 7-10, 20, 22, 25-27 and 45 stand rejected under 35 USC § 103(a) as being unpatentable over Ito, Uchiyama and various prior art references. The Examiner's rejections are respectfully traversed.

Claims 7-9, 22 and 25 have been canceled without prejudice or disclaimer of the subject matter contained therein, rendering the rejection of those claims moot. None of the prior art documents, alone or in combination, teach or suggest an overmold portion formed of a second thermoplastic material to extend over and adhere to at least part of the core portion and at least part of a first circuit element, as set forth in independent claim 14 of the present invention, or positioning at least one circuit element adjacent to the core element and having a first portion extending within the core element and a second portion extending

Appl. No. 09/885,354
Amdt. dated May 26, 2004
Reply to Office Action of Jan. 26, 2004
Page 18

outward from the core element, and forming an overmold structure of a second thermoplastic material to extend over and adhere to at least a portion of the core element and at least a portion of the at least one circuit element, as set forth in independent claim 30 of the present invention. Therefore, independent claim 14 and claims 10, 20, 22, 26 and 27 dependent thereon and independent claim 30 and claim 45 dependent thereon are patentably distinguishable from the referenced prior art documents. Accordingly, withdrawal of the rejection is respectfully requested.

VII. New Claims Added

New claims 49-53 have been added. New claims 49-52 correspond to claims 36, 37, 46 and 47, respectively, written in independent form. Support for new claim 53 can be found, for example, at page 13, line 12 to page 14, line 19, in reference to FIG. 9. Entry and consideration of claims 49-53 is respectfully requested.

VIII. Allowable Subject Matter

The Examiner states that claims 36-37, 44 and 46-48 would be allowable if rewritten in independent form, including all of the limitations of the base claim and any intervening claims. As described above, claims 36, 37, 46 and 47, respectively, written in independent form, are presented as new claims 49-52, respectively. Accordingly, allowance of claims 49-52 is respectfully requested.

IX. Conclusion

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

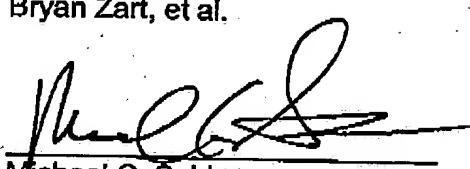
Appl. No. 09/885,354
Amdt. dated May 26, 2004
Rply to Office Action of Jan. 26, 2004
Page 19

Finally, if there are any formal matters remaining after this Amendment,
the Examiner is requested to telephone the undersigned attorney to attend to
those matters.

Respectfully submitted,

Bryan Zart, et al.

May 26, 2004
Date


Michael C. Soldner
Reg. No. 41,455
(763) 514-4842
Customer No. 27581